

## CLAIMS

What is claimed is:

5 1. A low profile transformer, comprising :  
a bobbin ; and  
a core structure, coupled to said bobbin, said core  
structure further comprising :  
an I-core ;  
two U-cores, coupled to said I-core.

10 2. The transformer according to claim 1, wherein said bobbin  
further comprises a primary coil, a secondary coil and a  
plurality of pins formed thereon.

15 3. A low profile transformer, comprising :  
a bobbin ; and  
a core structure, coupled to said bobbin, said core  
structure further comprising :  
20 an I-core, having at least one recessed edge ;  
two U-cores, coupled to said I-core, having at least one  
protrusive edge ;  
wherein said U-cores are coupled to said I-core by  
means of said recessed edge and said protrusive edge.

25 4. The transformer according to claim 3, wherein said bobbin  
further comprises a primary coil, a secondary coil and a  
plurality of pins formed thereon.

30 5. The transformer according to claim 3, wherein said recessed

edge is formed on a terminal of said I-core.

6. The transformer according to claim 3, wherein said protrusive edge is formed on a terminal of said U-core.

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7. A low profile transformer, comprising :

· a bobbin ; and

a core structure, coupled to said bobbin, said core structure further comprising :

an I-core, having at least one recessed edge ;

two U-cores, coupled to said I-core, having a plurality of protrusive edges ;

wherein said U-cores are coupled to said I-core by means of said recessed edge and said protrusive edges.

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8. The transformer according to claim 7, wherein said bobbin further comprises a primary coil, a secondary coil and a plurality of pins formed thereon.

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20 9. The transformer according to claim 7, wherein said recessed edge is formed on a terminal of said I-core.

25 10. The transformer according to claim 7, wherein said recessed edges are formed on different surfaces of said U-core.

11. The transformer according to claim 7, wherein said recessed edges are formed on the same surfaces of said U-core.

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12. The transformer according to claim 7, wherein said recessed edges are formed on corners of said U-core.